



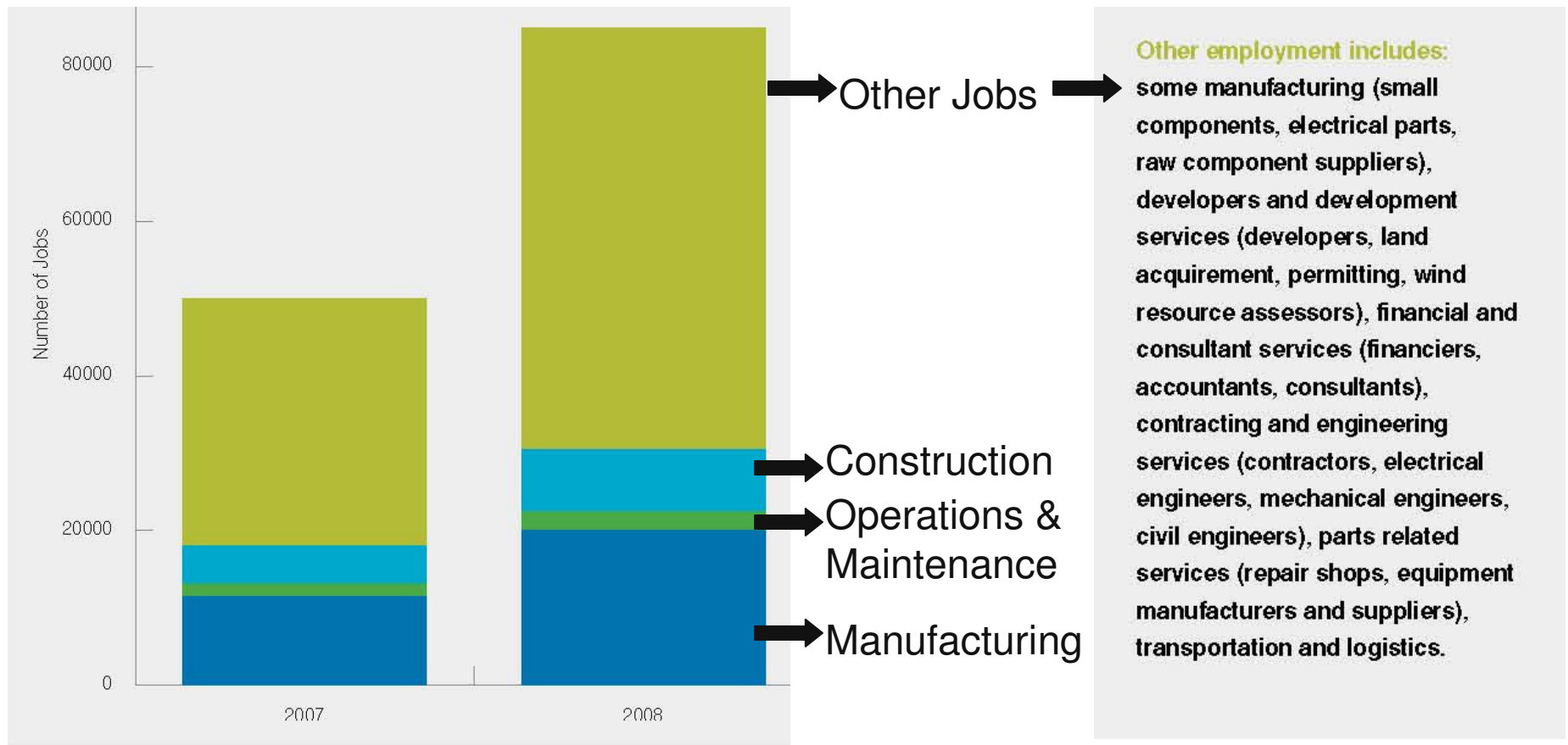
# **AWEA Educational Initiatives**

Susan Williams Sloan  
October 7, 2009



# U.S. Jobs in the Wind Industry

**85,000** total U.S. wind industry jobs, over **35,000** wind industry jobs created in 2008







# AWEA Education Survey



# Purpose of Survey

- Identify short and long term workforce needs for the wind energy industry.
- Gather information regarding Wind Energy programs currently offered or under development.
- Identify skill set required for wind turbine technicians.
- Identify community and K-12 outreach efforts.
- Anticipate future workforce needs.

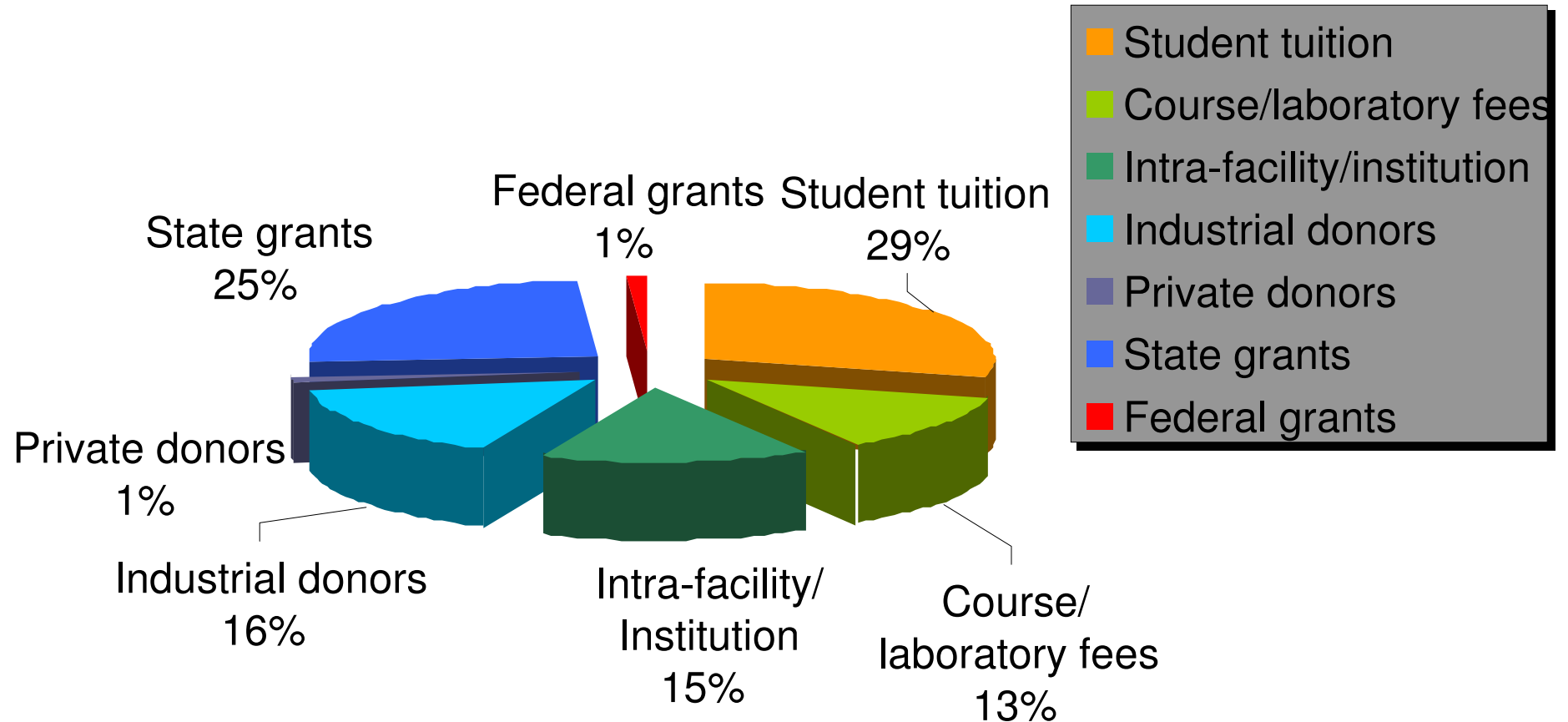
# Survey Response

We gathered over 200 responses.

- ✓ 128 from **industry members** and
- ✓ 78 **educational** institutions.

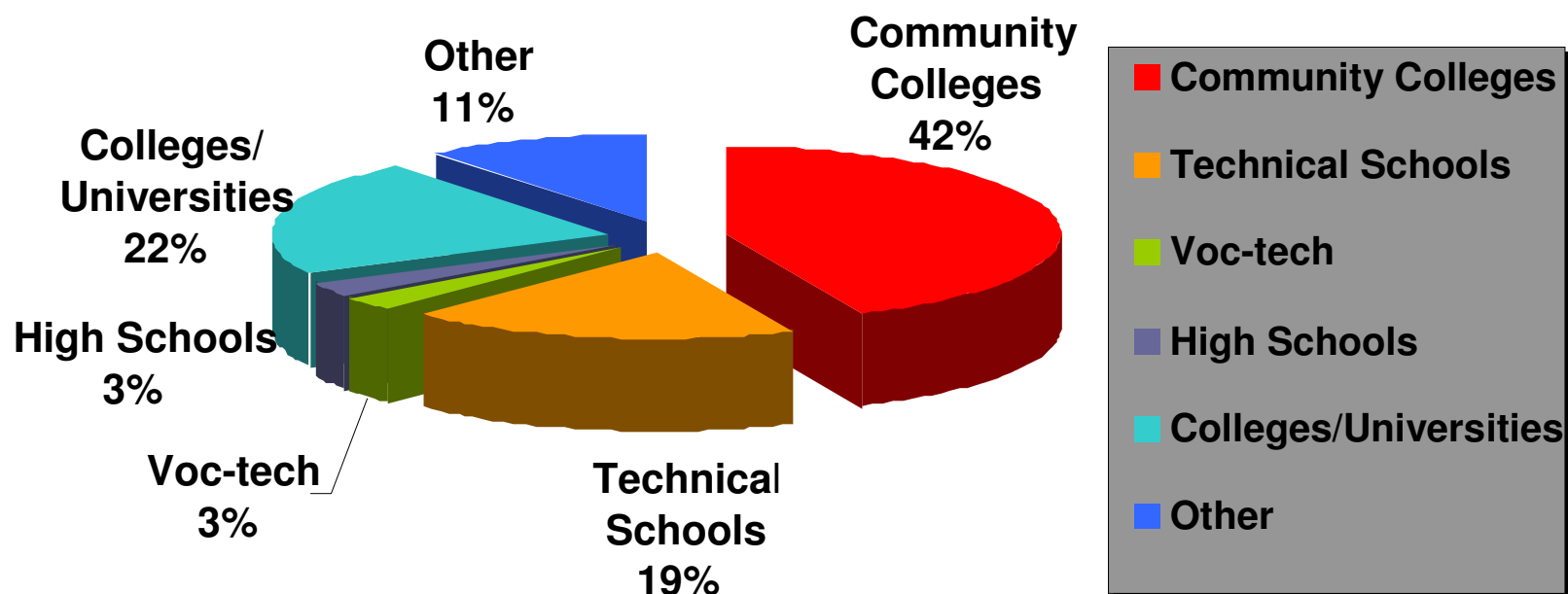
From conducting this survey we have gathered information from over 100 educational programs that focus on renewable energy or specifically on wind energy.

# Educational Funding Sources



# Type of Educational Institutions Receiving Support from Wind Companies

45 Educational Institutions indicated they received various type of Industrial Support



# **Top 10 Positions Identified for New Hires Requiring University Education**

- Manufacturing Engineer
- Material Engineer
- Account Auditors
- Project Manager
- Mechanical Engineer
- Electrical Engineer
- Engineering Manager
- Construction Manager
- Development Director
- Business Development Manager



# K-12 Initiative

## What is everyone doing?

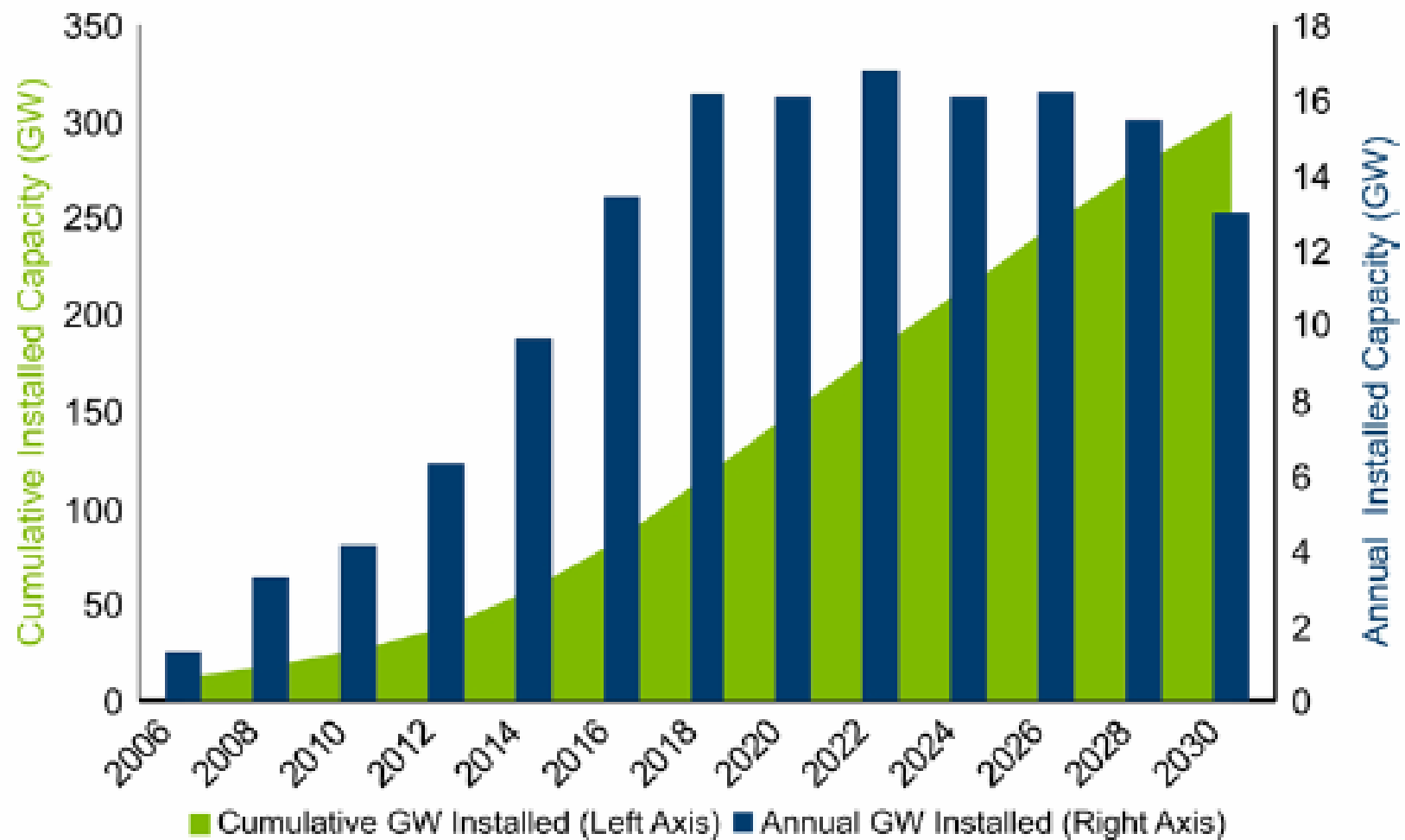
- **Business Members**

- 67% of 70 industry respondents which answered this question do not work with K-12 outreach.
- Of those that do...
  - Many provide speakers in schools or science fairs
  - Some work with KidWind or Wind for Schools

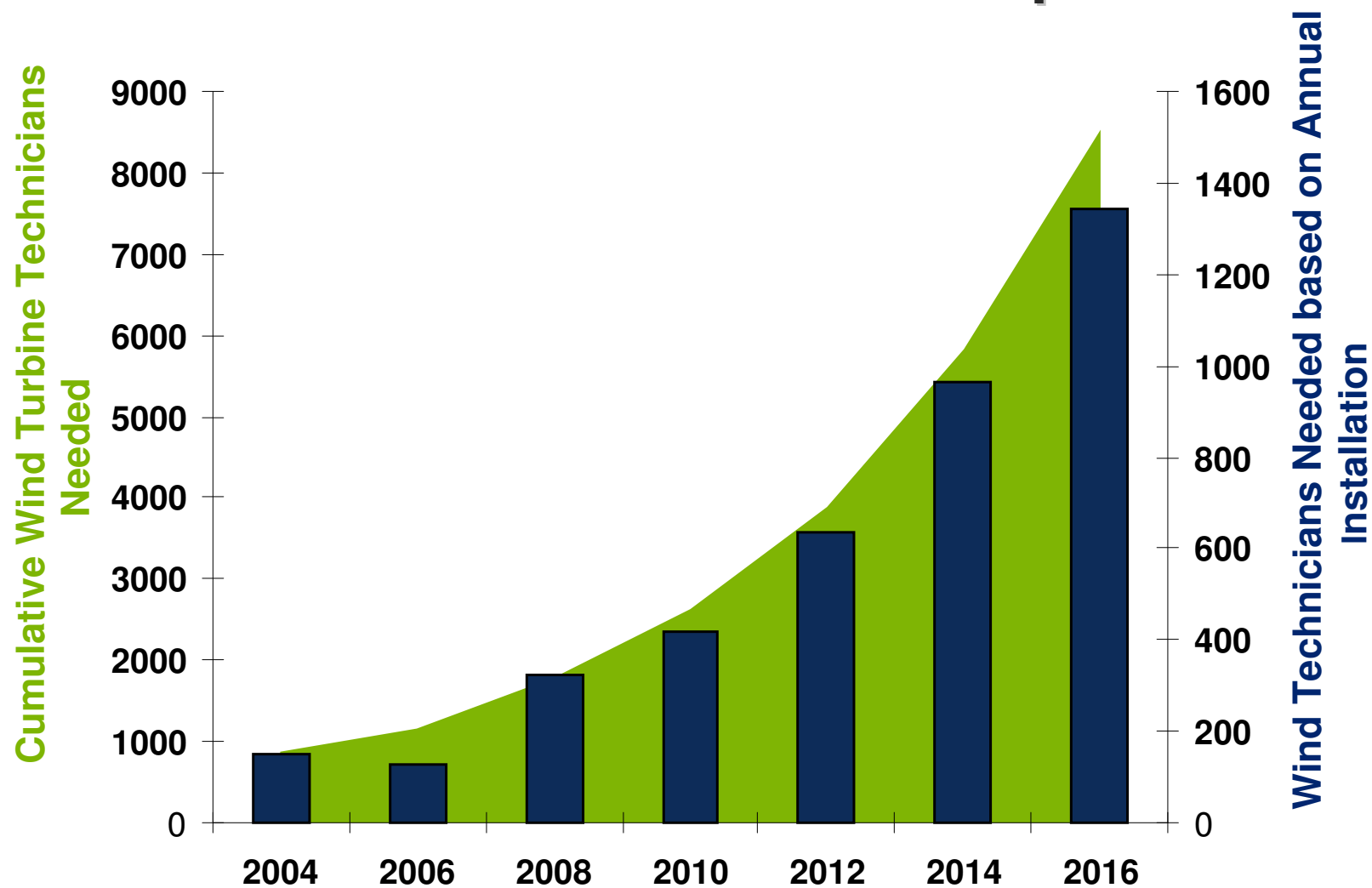
# Wind Turbine Technician Specific Results

# The 20% by 2030 Report

Figure 1-4. Annual and cumulative wind installations by 2030

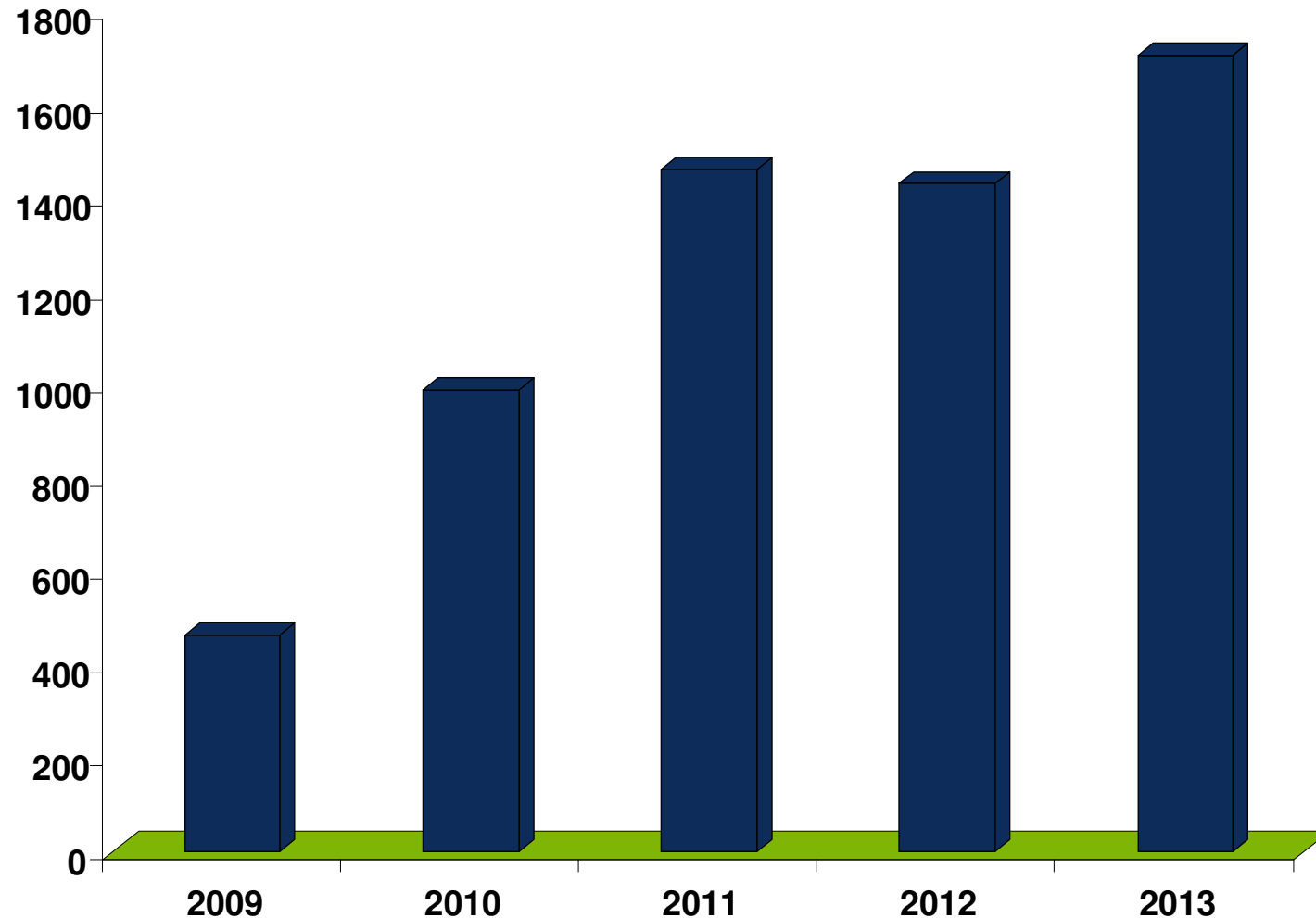


# Wind Turbine Technicians Needed Based on the 20% Report

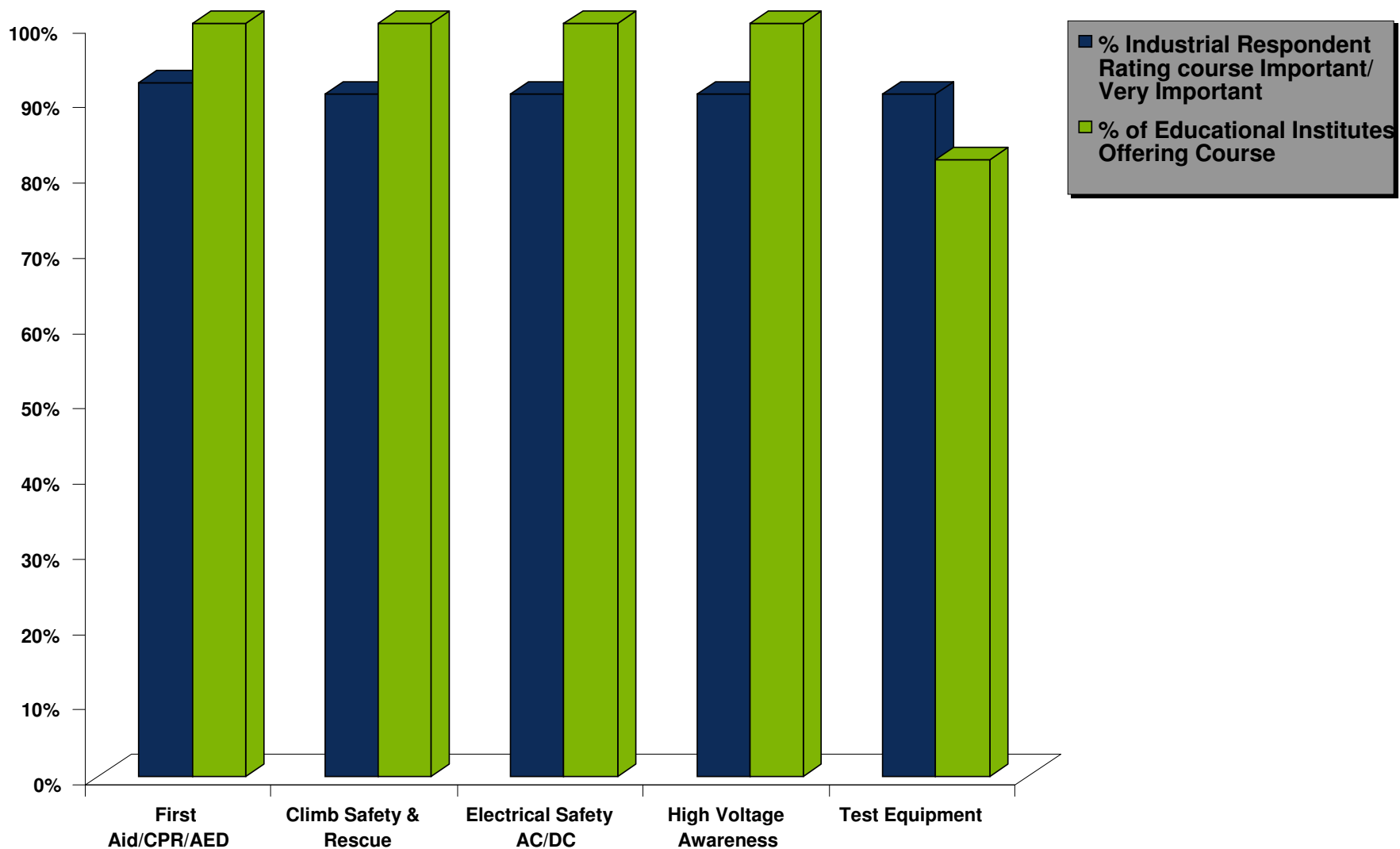




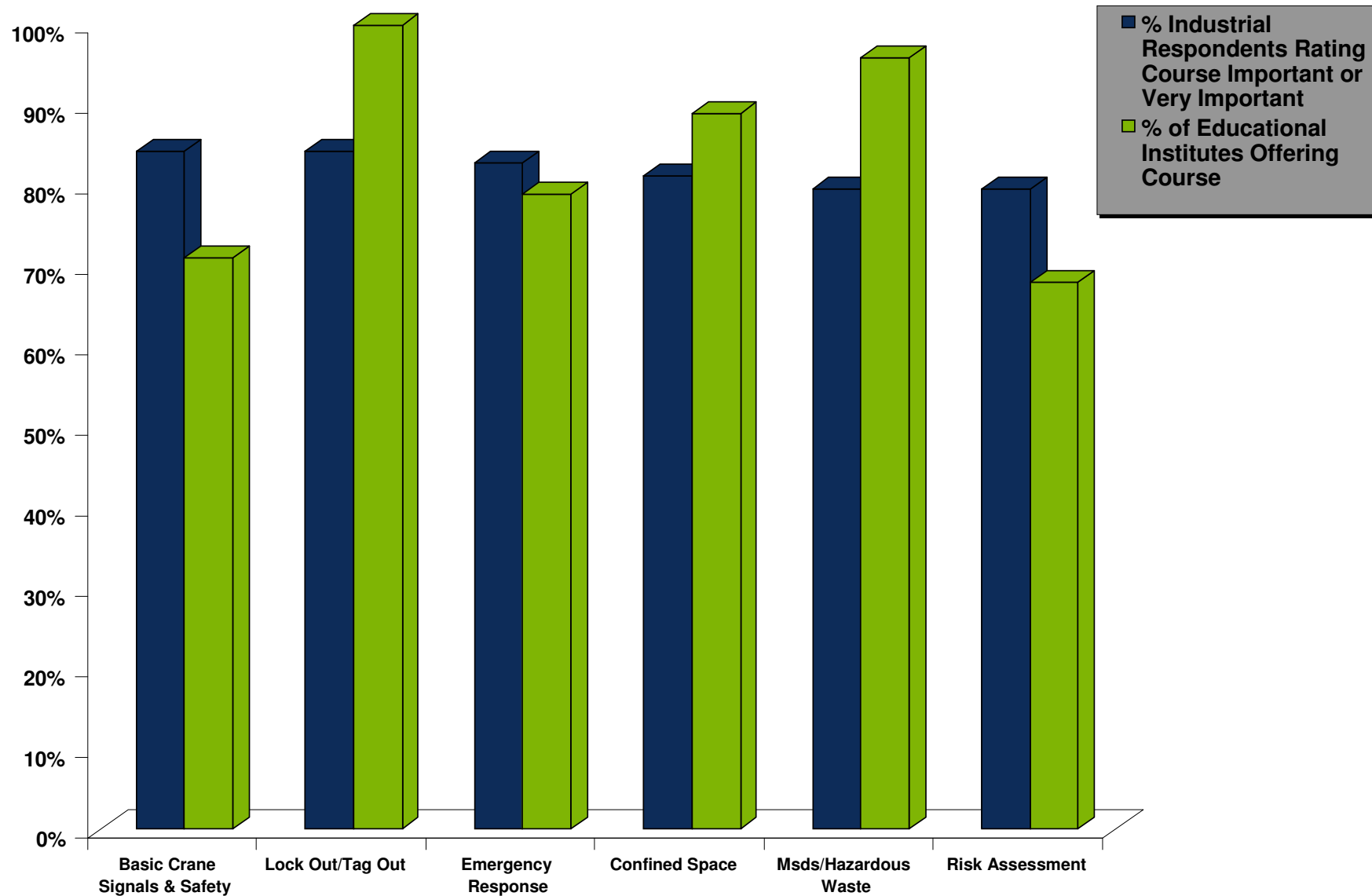
# Number of Expected Graduates in Wind Technology Programs



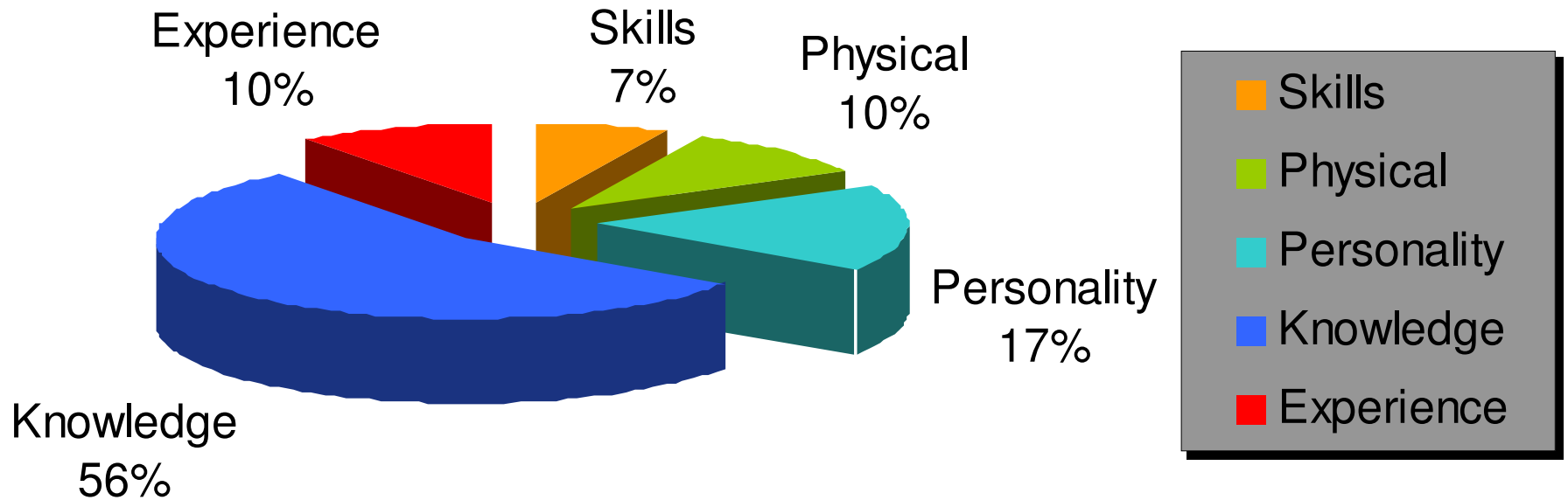
# Wind Turbine Technician Skills



# Wind Turbine Technician Skills

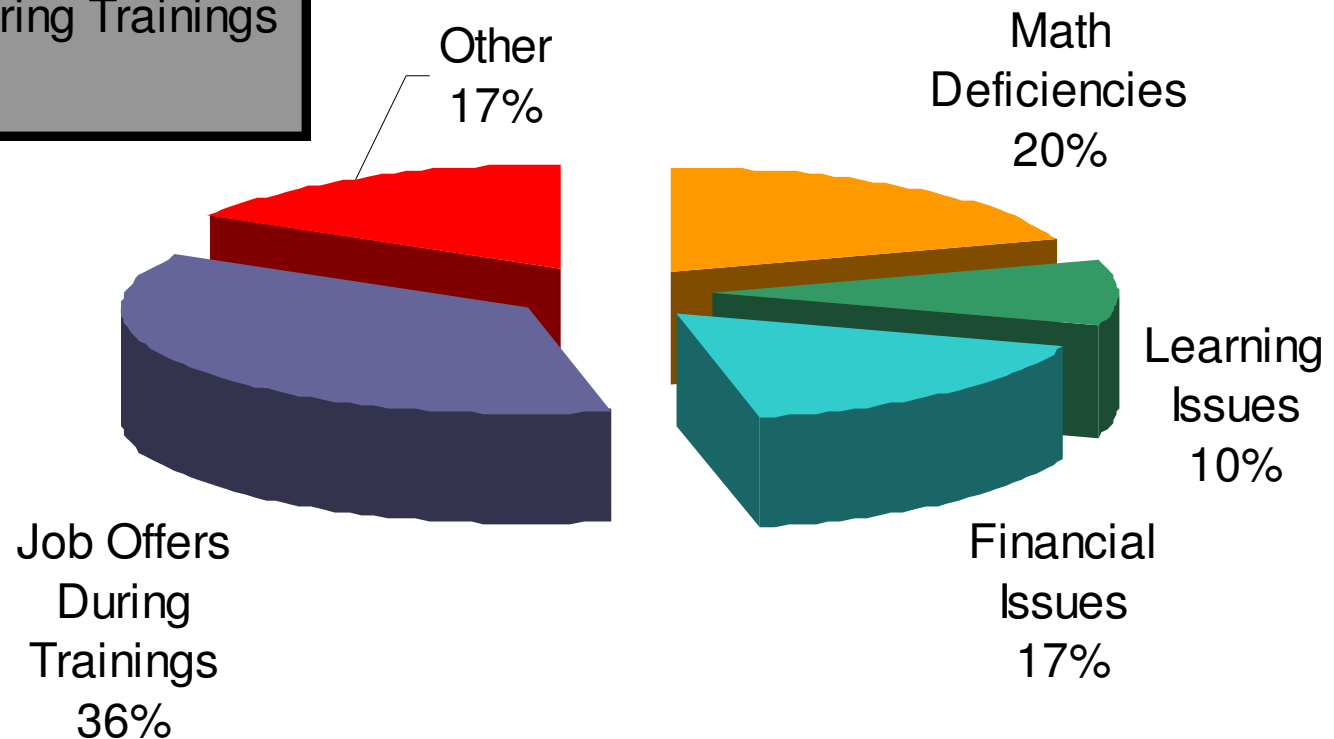
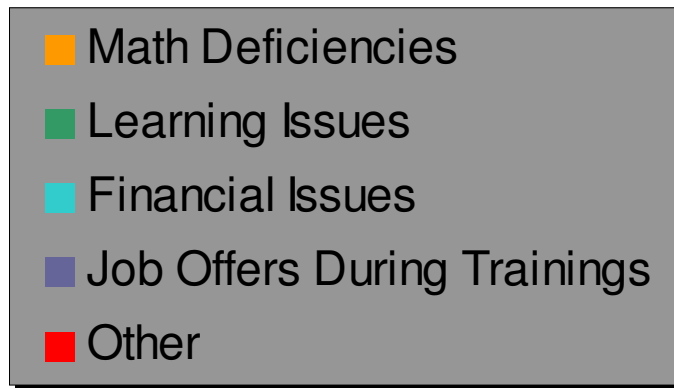


# Industry Identified Limitations in New Hires





# Educational Institutions Primary Reason for Students not Graduating





# Wind Turbine Service Technician Skill Set Process



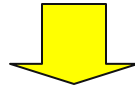
# Wind Turbine Service Technician Skill Set

- Wind technician programs are being created throughout the nation
- AWEA is establishing a skill set “seal of approval” to support these programs and our business members.
- June 2009, AWEA hosted a meeting to lay foundation for this skill set

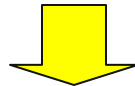


# Future Steps for the Skill Set

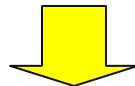
**Finalizing the skill set**



**Approval by AWEA Board**



**Establish a Review Committee**



**Programs that match the skill set will receive an  
AWEA “Seal of Approval”**



# Next Steps

- **AWEA Education Final Survey Release**
  - Before the end of the year
- **Education Programs Database**
  - Next couple of months
- **AWEA Wind Turbine Service Skill Set**
  - Pending AWEA Board Approval in November

# THANK YOU!

**For more information and updates please contact:  
[education@awea.org](mailto:education@awea.org)**